

CradlePoint COR IBR600/IBR650

INTEGRATED BROADBAND ROUTERS

IBR600 Series – Hardened for Machine-to-Machine



COR IBR600

The CradlePoint COR Series is built for your M2M network. COR is an affordable, highly featured compact router with an embedded modem designed for critical business and enterprise applications that require 24/7 connectivity.

With its compact size, sleek metal case, mounting bracket, and external mobile broadband and WiFi* (IBR600 only) antennas, CradlePoint COR is ideal for use in high-availability portable or fixed applications like ATMs, kiosks, surveillance, vehicles, etc.

CradlePoint COR provides instant network connectivity with a built-in modem – just add a mobile broadband plan or insert an activated SIM and go. It also supports traditional wired data networks like DSL, cable, or T1 for maximum network flexibility.

Increase your Internet availability and ensure maximum uptime; business-continuity features like failover/failback come standard in CradlePoint COR. When configured for failover, COR detects network failures and seamlessly switches over to a secondary WAN – keeping your network online.

COR is also ideal for deployment as a primary connection solution, especially when a wired Internet connection is unavailable or inconvenient.

CradlePoint COR provides VPN endpoint functionality, VLAN support, multiple remote management methods, modem data usage management and alerts, GPIO support, USB-to-serial console passthrough support for out-of-band management of connected devices, and the ability to be part of a PCI-DSS compliant solution. It allows for secure access to company networks for enterprise applications and provides a secure way to transmit sensitive data to and from a remote site.

COR now supports these enterprise routing protocols: BGP, OSPF, RIP; VRRP for router redundancy; and STP.

*WiFi is only supported on IBR600 models. IBR650 models have no WiFi radio.

THE HEART OF YOUR M2M NETWORK

- For use in business-critical, high-availability installations such as ATMs, kiosks, surveillance, vehicles, etc. that require 24/7 connectivity
- WiFi* (IBR600) and no-WiFi (IBR650) options available
Wireless 2x2 MIMO “N” WiFi (802.11 b/g/n)*
- Increase your network availability with WiPipe™-powered automatic failover and failback
- Supports both wireless and wired Internet connections (two Ethernet ports for either LAN/LAN or WAN/LAN)
- Several models available with 3G and/or 4G support on US and international carriers
- IPsec VPN termination (tunnel, NAT-T, and transport) with GRE support and site-to-site dynamic VPN with NHRP
- VLAN support to isolate, segment, and secure network traffic
- Create a custom branded hotspot with our captive portal feature (include ToS, advertisements, etc.)*
- Standalone active GPS support on -PWD models (1x1 “N” WiFi support)

WIPIPE CENTRAL: CLOUD-ENABLED MANAGEMENT

Rapidly deploy and dynamically manage networks at geographically distributed stores and branch locations with WiPipe Central, a cloud-enabled application and security platform. WiPipe Central integrates cloud management with your CradlePoint devices to improve productivity, increase reliability, reduce costs, and enhance the intelligence of your network and business operations.

Subscription required. See cradlepoint.com/wipipe for details.



POWER / RESET / LAN / WAN / MICRO USB
COR IBR650



SIM SLOT/ON-OFF / LEDs / SIGNAL STRENGTH
COR IBR600

cradlepoint.com/cor

COR IBR600/IBR650 Integrated Broadband Router

Provides advanced support for distributed operations and emerging industries that require flexible, reliable, and secure access such as temporary Internet installations, those needing additional network bandwidth or for kiosks, digital signage, and other Machine-to-Machine (M2M) applications.

Internet Access and Device Connectivity

- Includes integrated 3G/4G modem (see attached for options and specifications)
- 2 Ethernet LAN/WAN ports for Ethernet-enabled devices or landline Internet
- Wireless 2x2 MIMO "N" WiFi (802.11 b/g/n)*
- Supports up to 32 WiFi connections at a time*
- Two SSIDs (with individual security, bandwidth limits, and QoS settings; separate critical traffic or create a public WiFi hotspot)*

Security

- IPsec VPN (up to 5 concurrent sessions) and GRE Tunneling option, also supports passthrough VPN connections (IPsec, L2TP, PPTP)
- WEP, WPA, WPA2, WPA2 Enterprise with AES encryption for secure WiFi*
- 802.1Q VLAN support to isolate, segment and secure network traffic
- SPI (stateful packet inspection) firewall and NAT (network address translation) to prevent unwanted access to connected computers
- Variety of security features (URL filtering, IP & traffic filtering, DMZ, port forwarding) for safer Internet access
- Advanced security mode and reporting to facilitate PCI-DSS compliance

Flexibility

- First-time and advanced setup wizards for easy, swift, and secure setup
- Remote management with WiPipe Central™, SNMP v1/2c/3, and CLI over SSH
- IP passthrough support provides broadband-to-Ethernet adapter
- Create a WiFi hotspot with a captive portal (terms of service, ads, etc)*
- Network failover support & load balancing
- GPIO for additional hardware control, serial console available (USB-to-serial)
- LAN/WAN affinity to assign specific LAN traffic to a WAN
- Enterprise routing protocols: BGP, OSPF, RIP
- VRRP for enterprise router redundancy
- GPS NMEA GGA, VGT, and/or RMC sentence support

Service, Support, and Warranty

- CradleCare Premier 1, 2, and 3 year Enterprise Support Agreements available with 24/7 technical support, software upgrades and advanced hardware exchange
- Limited 1 year warranty included, access to software updates and hardware repair or replacement. 2 and 3 year warranty extensions available
- CradleCare Site Survey and Installation services offered for rapid deployment

IBR600/IBR650 Differences

- IBR600: Includes WiFi, hotspot services/captive portal, WiFi as WAN*
- IBR650: WiFi excluded in order to facilitate PCI and HIPAA compliance

*WiFi-related items are only supported on IBR600 models

Specifications

- WAN** Integrated modem, 10/100 Ethernet port, WiFi as WAN*
- LAN** WiFi (802.11 b/g/n)*, two 10/100 Ethernet ports (WAN or LAN)
- TEMPERATURE** -20°C to 60°C (-4°F to 140°F) operating modem as WAN
-20°C to 50°C (-4°F to 122°F) operating Ethernet as WAN
-30°C to 70°C (-22°F to 158°F) storage
- RELATIVE HUMIDITY** (non-condensing) 10% to 85%, operating
5% to 90%, storage
- POWER** DC input steady state voltage range: 9 - 18VDC
Recommended inline fuse for vehicle installations: 1.5A slow blow
- WIFI POWER*** (IBR600) Transmit power: 15dBm typ for all modes
receive sensitivity: -68dBm @ HT20 (11n), -65dBm @ HT40 (11n), -72dBm typ @ 54Mbps (11g), -84dBm typ @ 11Mbps (11b)
- SIZE** 3.3-in x 4-in x 0.9-in (85mm x 102mm x 22mm)
- WEIGHT** 7.2 oz (200g)
- CERTIFICATIONS** FCC, WiFi Alliance*, carrier certifications (see individual SKUs for additional certifications)

What's In The Box

- COR IBR600/IBR650 Integrated Broadband Router w/ metal mounting bracket
- External 3G/4G mobile broadband modem antennas (2) (SMA) w/ support for GPS on aux connection (some models), finger tighten only
- External WiFi antennas (2) reverse SMA*, finger tighten only
- 12V / 1.5A power supply w/ locking connector; GPIO/power cable available
- Setup Guide with warranty information

Accessories

High-gain external antennas (Omni-directional, Patch, Yagi, 12" Mag-mount, 4" Mini mag-mount), GPIO/power cable, see www.cradlepoint.com/QOB for more

Requirements

- Internet Service and Modem** Active mobile broadband plan with cellular provider or Ethernet-based Internet connection (DSL, cable, satellite, T1)
- Browser** (to configure router) Minimum of Firefox v2.0, Internet Explorer v7.0, Chrome, or Safari v1.0

Router Details

- WAN Security** NAT, SPI, ALG, inbound filtering of IP addresses, port blocking, service filtering (FTP, SMTP, HTTP, RPL, SNMP, DNS, ICMP, NNTP, POP3, SSH), protocol filtering, WAN ping (allow/ignore)
- Redundancy and Load Balancing** Failover/failback with 4G, 3G, Ethernet with rule selection, advanced load balancing options (round robin, spillover, data usage, rate), WAN failure detection, VRRP
- Intelligent Routing** UPnP, DMZ, virtual server/port forwarding, routing rules, NAT-less routing, wired or wireless WAN-to-LAN IP passthrough, route management, per-interface routing, content filtering, IP filtering, website filtering, per-client Web filtering, local DHCP server, DHCP client, DHCP relay, DNS, DNS proxy; ALGs: PPTP, L2TP, PPPoE passthrough, IPsec passthrough, FTP (passive), FTP (active), SIP, TFTP, IRC, MAC address filtering, Dynamic DNS, LAN/WAN affinity, VLAN support (802.1Q), STP, enterprise routing protocols: BGP/OSPF/RIP, multicast proxy support, IP setting overrides
- Management** WiPipe Central™ cloud-enabled management and application platform (subscription-based); web-based GUI (local management); optional RADIUS or TACACS+ username/password; remote WAN web-based management w/access control (HTTP, HTTPS); SNMP v1, v2c, & v3; CLI over SSH, SSH to serial, SSH to telnet; API; one-button firmware upgrade; modem configuration, update, and management; modem data usage w/ alerts, per-client data usage; custom AT scripting to modems

Performance & Health Monitoring WiPipe™ advanced QoS with traffic shaping, Modem Health Management (MHM) improves connectivity of modem, SSID-based priority, WAN port speed control, several levels of basic and advanced logging for troubleshooting

VPN (IPsec) Tunnel, NAT-T, and transport modes; connect to CradlePoint, Cisco/ Linksys, CheckPoint, Watchguard, Juniper, SonicWall, Adtran and others; certificate support; Hash (MD5, SHA128, SHA256, SHA384, SHA512), Cipher (AES, 3DES, DES), support for 5 concurrent connections, GRE tunneling, multiple networks supported in a single tunnel, site-to-site dynamic VPN with NHRP

GPS Active standalone GPS on -PWD models, passive standalone GPS on others; GUI mapping as well as local (LAN) or remote (WAN) server logging; NMEA GGA, VGT, and/or RMC sentence support



One-year limited hardware warranty only available in the US and Canada. Product specifications are subject to change without notice, and product appearance may differ from image depicted on this package. This product requires either an active subscription from a wireless service provider or an Ethernet-based broadband service from an Internet service provider to receive internet service. Check with your broadband provider for service coverage, fees, and other charges. © 2013 CradlePoint, Inc. All rights reserved. CradlePoint, WiPipe™, and the WiPipe logo are trademarks of CradlePoint, Inc. in the US and other countries. Other trademarks are the property of their respective owners.

Ordering information

Cloud-Enabled Management and Application Platform	
WiPipe Central	<p>Rapidly deploy and dynamically manage networks at geographically distributed stores and branch locations with WiPipe Central, a cloud-enabled application and security platform. WiPipe Central integrates cloud management with your CradlePoint devices to improve productivity, increase reliability, reduce costs, and enhance the intelligence of your network and business operations.</p> <ul style="list-style-type: none"> • Deployment – configure devices by groups or individually, and update firmware easily with a few clicks. • Management – monitor device statuses and set proactive alerts for optimized 3G/4G data usage and network uptime. • Intelligence – view network analytics, manage security and PCI compliance, and measure mobile customer traffic using WiFi analytics. <p>Annual and multi-year licenses available. See cradlepoint.com/wipipe for details.</p>

Enterprise Support Agreements	
CradleCare Premium	<p>When your applications are mission critical, you need the assurance that only the CradleCare Premier plan can provide: 24-hour coverage every day, all year – including holidays. As a CradleCare Premier customer, you will be assigned an account engineer* for consistency and follow-up on all your cases, with periodic case reviews provided.</p> <ul style="list-style-type: none"> • Complete technical support, 24/7 coverage; unlimited 24-hour technical support center assistance; extended warranty; next-day parts replacement; assigned account engineer*; guaranteed response times; online video-based training sessions; software bug fixes and upgrades; advanced replacement; access to CradlePoint Enterprise Advanced Services Knowledge Base and online documentation. <p><i>*Account engineer for customers with 50+ sites.</i></p>
CradleCare Warranty Extension	<p>This plan represents an extension of the standard 1-year CradlePoint warranty to 2 or 3 years.</p> <ul style="list-style-type: none"> • One-time enterprise technical support; software bug fixes; access to CradlePoint Enterprise Advanced Services Knowledge Base and online documentation; hardware repair/replacement.

Accessories (see CradlePoint's antenna ordering and installation guide for more antenna information)	
Part # 170587-000	Directional Patch antennas for external (outside) mounting
Part # 170588-000	Directional Yagi (Log-Periodic) antennas for external (outside) mounting
Part # 170586-000	Omni-directional antennas for external (outside) mounting
Part # 170605-000	12" Mag-mount antenna
Part # 170606-000	4" Mini mag-mount antenna
Part # 170585-000	COR 2 meter power & GPIO cable (direct wire)
Part # 170584-000	COR wall power adapter
Part # 170446-002	COR international wall power adapter (for IBR600P)
Part # 170593-000	COR mounting bracket

Verizon SKUs

WiFi

Active GPS w/ WiFi

COR IBR600LE-VZ 4G/3G LTE/EVDO for Verizon

COR IBR600LE-PWD Active GPS w/ LTE Verizon

Technology: LTE, EVDO Rev A

Technology: LTE, EVDO Rev A

Downlink Rates: LTE 100 Mbps, EVDO 3.1 Mbps (theoretical)

Downlink Rates: LTE 100 Mbps, EVDO 3.1 Mbps (theoretical)

Uplink Rates: LTE 50 Mbps, EVDO 1.8 Mbps (theoretical)

Uplink Rates: LTE 50 Mbps, EVDO 1.8 Mbps (theoretical)

Frequency Bands:

- LTE Band 13 (700MHz)
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

Frequency Bands:

- LTE Band 13 (700MHz)
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

Module Power: LTE 23 +/- 1dBm, EVDO 24 +/- 1dBm (typical conducted)

Module Power: LTE 23 +/- 1dBm, EVDO 24 +/- 1dBm (typical conducted)

Module: Sierra Wireless MC7750

Module: Sierra Wireless MC7750

Antennas: two SMA male (plug), 1 dBi (LTE), 2 dBi (CDMA) gain; finger tighten only; support for GPS on aux connection

Antennas: two SMA male (plug), 1 dBi (LTE), 2 dBi (CDMA) gain; finger tighten only

GPS: standalone GPS support

GPS: active standalone GPS support; SMA connector (with included adapter) with 3.3V @ 100mA max WiFi reduced to 1x1 N

Power:

idle: typical=350mA@12V(4.2W) worst case=700mA@12V(8.4W)
Tx/Rx: typical=600mA@12V(7.2W) worst case=1200mA@12V(14.4W)

Power:

idle: typical=350mA@12V(4.2W) worst case=700mA@12V(8.4W)
Tx/Rx: typical=600mA@12V(7.2W) worst case=1200mA@12V(14.4W)

Industry Standards & Certs: FCC, WiFi Alliance, Verizon

Industry Standards & Certs: FCC, WiFi Alliance, Verizon

Certification Part Number: IBR600LE-VZ

Certification Part Number: IBR600LE-PWD

4G

WiFi

No-WiFi

COR IBR600E-VZ 3G EVDO for Verizon

COR IBR650E-VZ 3G EVDO for Verizon

Technology: EVDO Rev A

Technology: EVDO Rev A

Downlink Rates: 3.1 Mbps (theoretical)

Downlink Rates: 3.1 Mbps (theoretical)

Uplink Rates: 1.8 Mbps (theoretical)

Uplink Rates: 1.8 Mbps (theoretical)

Frequency Bands:

- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

Frequency Bands:

- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

Module Power: 24 +/- 0.5 dBm (typical conducted)

Module Power: 24 +/- 0.5dBm (typical conducted)

Module: Sierra Wireless 5728v

Module: Sierra Wireless 5728v

Antennas: two SMA male (plug), 2 dBi gain; finger tight is sufficient; maximum torque spec is 7kgf-cm

Antennas: two SMA male (plug), 2 dBi gain; finger tight is sufficient; maximum torque spec is 7kgf-cm

GPS: standalone GPS support

GPS: standalone GPS support

Power:

idle: typical=300mA@12V (3.6W) worst case=600mA@12V (7.2W)
Tx/Rx: typical=500mA@12V (6W) worst case=1000mA@12V (12W)

Power:

idle: typical=300mA@12V (3.6W) worst case=600mA@12V (7.2W)
Tx/Rx: typical=500mA@12V (6W) worst case=1000mA@12V (12W)

Industry Standards & Certs: FCC, WiFi Alliance, Verizon

Industry Standards & Certs: FCC, Verizon

Certification Part Number: IBR600E-VZ

Certification Part Number: IBR650E-VZ

3G

AT&T SKUs

WiFi

Active GPS w/ WiFi

4G

COR IBR600LP-AT	4G/3G LTE/HSPA+ for AT&T
Technology: LTE, HSPA+	
Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps (theoretical)	
Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)	
Frequency Bands:	
<ul style="list-style-type: none"> LTE Band 17 (700 MHz), Band 4 (AWS) HSPA+/UMTS (850/1900/2100 MHz) GSM/GPRS/EDGE (850/900/1800/1900 MHz) 	
Module Power: LTE 23 +/- 1 dBm, UMTS 23 +/- 1 dBm (typical conducted)	
Module: Sierra Wireless MC7700	
Antennas: two SMA male (plug), 1 dBi (LTE), 2 dBi (HSPA+) gain; finger tighten only; support for GPS on aux connection	
GPS: standalone GPS support, use dedicated GPS antenna on aux	
Power:	
idle: typical=350mA@12V(4.2W) worst case=700mA@12V(8.4W)	
Tx/Rx: typical=600mA@12V(7.2W) worst case=1200mA@12V(14.4W)	
Industry Standards & Certs: PTCRB, FCC, IC, CE, WiFi Alliance, AT&T, Rogers	
Certification Part Number: IBR600LP-AT	

COR IBR600LP-PWD	Active GPS w/ LTE for AT&T
Technology: LTE, HSPA+	
Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps (theoretical)	
Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)	
Frequency Bands:	
<ul style="list-style-type: none"> LTE Band 17 (700 MHz), Band 4 (AWS) HSPA+/UMTS (850/1900/2100 MHz) GSM/GPRS/EDGE (850/900/1800/1900 MHz) 	
Module Power: LTE 23 +/- 1 dBm, UMTS 23 +/- 1 dBm (typical conducted)	
Module: Sierra Wireless MC7700	
Antennas: two SMA male (plug), 1 dBi (LTE), 2 dBi (HSPA+) gain; finger tighten only	
GPS: active standalone GPS support; SMA connector (with included adapter) with 3.3V @ 100mA max; WiFi reduced to 1x1 N	
Power:	
idle: typical=350mA@12V(4.2W) worst case=700mA@12V(8.4W)	
Tx/Rx: typical=600mA@12V(7.2W) worst case=1200mA@12V(14.4W)	
Industry Standards & Certs: PTCRB, FCC, IC, CE, WiFi Alliance, AT&T	
Certification Part Number: IBR600LP-PWD	

No-WiFi

3.7G

COR IBR650P-AT	HSPA+ for AT&T
Technology: HSPA+	
Downlink Rates: HSPA+ 21 Mbps (theoretical)	
Uplink Rates: HSPA+ 5.76 Mbps (theoretical)	
Frequency Bands:	
<ul style="list-style-type: none"> HSPA+/UMTS (850/1900/2100 MHz) GSM/GPRS/EDGE (850/900/1800/1900 MHz) 	
Module Power: UMTS 23 +/- 1 dBm (typical conducted)	
Module: Sierra Wireless 8705	
Antennas: two SMA male (plug), 2 dBi gain; finger tighten only; maximum torque spec is 7kgf-cm	
GPS: standalone GPS support	
Industry Standards & Certs: PTCRB, GCF-CC, FCC, IC, CE, AT&T	
Power:	
idle: typical=350mA@12V(4.2W) worst case=700mA@12V(8.4W)	
Tx/Rx: typical=600mA@12V(7.2W) worst case=1200mA@12V(14.4W)	
Certification Part Number: IBR650P-AT	

Sprint SKUs

WiFi

No-WiFi

COR IBR600E-SP

3G EVDO for Sprint

Technology: EVDO Rev A

Downlink Rates: 3.1 Mbps (theoretical)

Uplink Rates: 1.8 Mbps (theoretical)

Frequency Bands:

- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

Module Power: 24 +/- 0.5 dBm (typical conducted)

Module: Sierra Wireless 5728v

Antennas: Two SMA male (plug), 2 dBi gain; finger tighten only; maximum torque spec is 7kgf-cm

GPS: standalone GPS support

Power:

idle: typical=300mA@12V (3.6W) worst case=600mA@12V (7.2W)
Tx/Rx: typical=500mA@12V (6W) worst case=1000mA@12V (12W)

Industry Standards & Certs: FCC, WiFi Alliance, 802.3, plus carrier specific certifications as required

Certification Part Number: IBR600E-SP

COR IBR650E-SP

3G EVDO for Sprint

Technology: EVDO Rev A

Downlink Rates: 3.1 Mbps (theoretical)

Uplink Rates: 1.8 Mbps (theoretical)

Frequency Bands:

- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

Module Power: 24 +/- 0.5 dBm (typical conducted)

Module: Sierra Wireless 5728v

Antennas: Two SMA male (plug), 2 dBi gain; finger tighten only; maximum torque spec is 7kgf-cm

GPS: standalone GPS support

Power:

idle: typical=300mA@12V (3.6W) worst case=600mA@12V (7.2W)
Tx/Rx: typical=500mA@12V (6W) worst case=1000mA@12V (12W)

Industry Standards & Certs: FCC, 802.3, plus carrier specific certifications as required

Certification Part Number: IBR650E-SP

3G

Clearwire SKUs

No-WiFi

COR IBR650W

4G WiMAX for CLEAR

Technology: WiMAX 802.16e Wave 2

Downlink Rates: 10 Mbps peak, 6 Mbps average

Uplink Rates: 5 Mbps peak, 1.2 Mbps average

Frequency Band: 2500 MHz band

Module Power: 23.5 +/- 0.5 dBm (RSU/CPE)

Module: Beceem 250 chipset

Antennas: two SMA male (plug), 5 dBi gain; finger tighten only; maximum torque spec is 7kgf-cm

GPS: no GPS support

Power:

idle: typical=350mA@12V(4.2W) worst case=700mA@12V(8.4W)

Tx/Rx: typical=600mA@12V(7.2W) worst case=1200mA@12V(14.4W)

Industry Standards & Certs: FCC, 802.3, CLEAR

Certification Part Number: IBR650W

4G

International SKUs

WiFi

COR IBR600P(-INTL) HSPA+ for International

Technology: HSPA+

Downlink Rates: HSPA+ 21 Mbps (theoretical)

Uplink Rates: HSPA+ 5.76 Mbps (theoretical)

Frequency Band:

- HSPA+/UMTS (850/900/1900/2100 MHz)
- GSM/GPRS/EDGE (850/900/1800/1900 MHz)

NOTE: The only difference between IBR600P and IBR600P-INTL is that the -INTL version comes with an adapter kit for non-USA/Canada power outlets (US, EU, UK, AUS)

3.7G

Module Power: UMTS 23 +/-1 dBm (typical conducted)

Module: Sierra Wireless 8705

Antennas: two SMA male (plug), 2 dBi gain; finger tighten only; maximum torque spec is 7kgf-cm

GPS: standalone GPS support

Industry Standards & Certs: PTCRB, GCF-CC, FCC, IC, CE, WiFi Alliance

Power

idle: typical=350mA@12V(4.2W) worst case=700mA@12V(8.4W)
Tx/Rx: typical=600mA@12V(7.2W) worst case=1200mA@12V(14.4W)

Certification Part Number: IBR600P

COR IBR600LP-AT 4G/3G LTE/HSPA+ for AT&T & Canada

Technology: LTE, HSPA+

Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps (theoretical)

Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)

Frequency Bands:

- LTE Band 17 (700 MHz), Band 4 (AWS)
- HSPA+/UMTS (850/1900/2100 MHz)
- GSM/GPRS/EDGE (850/900/1800/1900 MHz)

4G

Module Power: LTE 23 +/- 1dBm, UMTS 23 +/- 1dBm (typical conducted)

Module: Sierra Wireless MC7700

Antennas: Two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain. w/ support for GPS on aux connection, finger tighten only.

GPS: standalone GPS support, use dedicated GPS antenna on aux

Power:

idle: typical=350mA@12V(4.2W) worst case=700mA@12V(8.4W)
Tx/Rx: typical=600mA@12V(7.2W) worst case=1200mA@12V(14.4W)

Industry Standards & Certs: PTCRB, FCC, IC, CE, WiFi Alliance, AT&T, Rogers

Certification Part Number: IBR600LP-AT